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XI.—*The Birds of Hong Kong, Macao, and the West River or Si Kiang in South-eastern China, with special reference to their Nidification and Seasonal Movements.*—Part II. By Lieutenant R. E. VAUGHAN, R.N., M.B.O.U., and Staff-Surgeon K. H. JONES, M.B., R.N., F.Z.S., M.B.O.U.

[Continued from p. 76.]

(Plate V. *)

MOTACILLA OCULARIS.

The Streak-eyed Wagtail is an exceedingly common bird of passage at Hong Kong, Macao, and on the Kwang Tung coast generally. Although appearing as early as August 9 on migration, the latter part of September or early October is the more usual time for their advent, when immense numbers may be seen on the cricket-ground and in the Naval dockyard and elsewhere on the island of Hong Kong.

The birds on their passage usually roost in the trees, and as many as fifty were observed to crowd themselves, with much bickering, into a small tree in the Naval dockyard. They leave again on the spring migration in April, and probably only breed in the far north of Asia: they do not occur inland, so that their migration is along the coast-line.

At Hong Kong this species is very much more numerous than *Motacilla leucopsis*.

* For explanation of the Plate, see p. 200.

MOTACILLA LEUCOPSIS.

The White-faced Wagtail is mainly a winter visitor, but a very few pairs remain, both on the coast and inland, to rear their young.

This bird is one of the earliest to arrive from the northern breeding-grounds, and as early as the end of August or the first week in September numbers are pouring south, especially in the western parts of Kwang Tung and in Kwang Si. The migratory rushes take place well on into October, and hundreds of the Wagtails may be seen at evening time on the Hong Kong cricket-ground, the majority of which are immature. As with its near allies, the young, after being hatched, move about with their parents, and family-parties appear on migration.

As early as March 18 a pair was found to be building a nest in a hayrick; and on April 15, at Samshui, a nest containing five young birds was noticed in the thatch of some brickworks near that place. In June, birds, evidently breeding, were seen in Hong Kong. At Tam Chau and Kwei Hsien, in Kwang Si, young birds were seen in July and August.

On the upper reaches of the West River, where there still exist virgin forests, huge rafts of logs are made in the winter months, and these, covered with turf, bamboo-twigs and vegetable rubbish, are floated down the river when the summer floods permit. On each of these rafts there is invariably either one or a pair of these birds, and they live entirely on this floating home and journey with it for many hundreds of miles from west to east, indeed until the raft is broken up at Canton. The birds while on the rafts catch innumerable flies.

This species has evidently a wide breeding-range, as it is known to nest in Shantung, Fokien, Kwang Si, and Kwang Tung.

About the third week in April most birds proceeding north leave Hong Kong, but some migrants linger until the second week in May.

MOTACILLA MELANOPE.

The Grey Wagtail is a common winter visitor to the Kwang Tung coast, and some individuals arrive from the north as early as September 6, but the greater number appear about the first half of October.

During this autumn migration these birds at times absolutely swarm in the paddy-fields, where they descend to feed. The Chinese sometimes catch them after dark at this time by taking a net and drawing it over a small paddy-field. When the feeding birds hear this they spring up and catch their necks in the meshes. At the end of the draw the two Chinamen drop the net and walk along it extracting the birds, which are then sold as "Rice-birds."

Many of these Wagtails appear to have the breast of a deeper yellow and perhaps a shorter tail than is usually seen in western specimens.

MOTACILLA TAIVANA.

The Eastern Yellow Wagtail is a very local winter visitor, but is abundant in the marshes at Shiapo and Samchau near Samshui, the only two places where it is found.

Unlike most Wagtails, these birds are exceedingly shy and retiring, confining themselves to the wettest portions of the marshes; they hide in rank decaying vegetation or skulk in the long grass. This species has been observed as early as August 31.

MOTACILLA FLAVA.

This Wagtail was only seen during the spring migration in the months of March, April, and May. It was observed at Samshui and near Tolo Harbour, Kowloon Peninsula. It is a rather unusual spring bird of passage.

LIMONIDROMUS INDICUS.

This species was noticed both in Kwang Si and Kwang Tung, on the coast as well as inland, but always singly. Individuals were seen in May, August, November, and December.

ANTHUS CERVINUS.

One skin of this Pipit was found among those of *Anthus maculatus*.

ANTHUS MACULATUS.

The Eastern Tree-Pipit is a very common winter visitor to Hong Kong, Macao, and the West River. The birds arrive in October and usually leave in April, but have been seen as late as the middle of May.

Although this Pipit feeds in the marshes in mulberry-canes and long grass, it is commonly enough observed getting its living by the side of frequented roads and in gardens at Hong Kong, but the most curious thing about it is its marked habit of feeding in trees. It flies up into a tree, usually a fir-tree, runs along one bough, hops on to the next, and runs along that, hunting busily for insects all the time.

Swinhoe noticed that when disturbed these birds always fly into a tree, but he did not apparently observe this arboreal mode of picking up a living.

ANTHUS RICHARDI.

Richard's Pipit is an exceedingly common winter visitor to Kwang Tung, the first arrivals appearing early in October or at the end of September, and the later departures taking place towards the end of May.

There is with this species, as with many others, a good deal of local movement in the winter months, in addition to the actual great migratory rushes. On January 4 numbers were seen where the previous day there had been none, and these were not at all likely to have come from far north at that time of year.

In southern China this species is very tame and allows one to come within a few yards of it. It has been seen to fly up into a tree when disturbed, but this is unusual.

It is possible that some of these birds may breed in Kwang Si, for one was observed at Tam Chau on July 12.

CHLORIS SINICA.

The Chinese Greenfinch is a resident species on the West River, but in Hong Kong and Kowloon it was only observed as a winter visitor, and an irregular one at that.

Up the West River these birds go about in small parties during the summer, but in the autumn and winter they form themselves into considerable flocks, and these are augmented by very large numbers of birds which come down from the north on migration. In Feb. 1902, in very cold weather, large flocks appeared at Kowloon, whence they departed as it grew warmer.

Their cry is a cheerful twitter with some resemblance to that of the English Greenfinch, but lacking the mournful long-drawn note of the latter.

This Greenfinch is partly insectivorous and partly frugivorous, and is especially fond of the seeds of fir-cones. Nesting sometimes commences very early, for a well-fledged young bird was seen in a cage on April 6. Nests have been taken from March 29 until June 17 in bamboos, evergreens, and various fruit-trees; they are slight structures, but well built, and small for the size of the bird. At the nest the birds are very bold. The usual clutch is four, but five eggs have been observed.

Eggs vary in length from .79 to .64 and in breadth from .55 to .49; they average $.72 \times .52$ (see Plate V. fig. 7).

EOPHONA MELANURA.

The Chinese Grosbeak occurs regularly but never abundantly at Hong Kong in the months of January, February, and March. On the North River a considerable party was seen on April 24, and small flocks were noticed also on the West River in that month on passage northwards.

Swinhoe noticed this species in plenty at Canton in early spring, and surmised that it bred there, but in this there can be little doubt he was mistaken.

PASSER MONTANUS.

As is very well known, Tree-Sparrows in China take the place of *Passer domesticus* in western Europe, and have become noisy, bold, and eminently parasitic on man, in precisely the same way as the latter.

The Tree-Sparrow is, if anything, rather bolder and more impudent than the European House-Sparrow, for not only is it exceedingly fond of the outsides of houses at Hong Kong but frequently comes inside as well, through the wide open windows.

In the early autumn great flocks of these birds, in company with a few Russet Sparrows and Buntings, are seen in the paddy-fields, where they proceed to gorge themselves with ripe grain. In the middle of March they repair to their nesting-sites, which are nearly always about houses, under the eaves of temples, or in the mud walls of the cottages, in which last situation they peck out a hole for themselves in the friable material.

Kwei Hsien in Kwang Si is the only place where these birds were seen to be nesting in trees, and there they did not nest in holes in the trees, as is usual in the west, but built, as do the House-Sparrows under similar circumstances in Europe, a large untidy nest of straw and grass. Eggs may be found at the end of March, and five is the usual number in a first clutch, but as many as seven were noticed.

At least three broods are got off in the summer, and fresh eggs have been taken up to August 1st. These later clutches do not contain more than three eggs.

PASSER RUTILANS.

The Russet Sparrow is a fairly common bird of passage in the month of April, when considerable flocks pass through on their way to the north.

The flocks do not, as a rule, mix with those of *Passer montanus*, but keep strictly to themselves, neither do they settle on houses and seek human neighbourhood, but rest on trees in the fields and open country. The note of this bird

is not so loud and a good deal sweeter than that of the Tree-Sparrow. The crops examined were full of rice-grains.

In January a large flock was noticed, so that apparently the bird at times spends the winter on the West River.

Both the Russet and Tree-Sparrow are sometimes seen crowded together in the bamboo-cages of the Hong Kong bird-shops.

EMBERIZA PUSILLA.

The Little Bunting occurs during the winter, and on New Year's Day, 1906, large numbers of these birds accompanied by *Otocompsa emeria* in big flocks were found in the mulberry-canes near Samshui. It was blowing from the northward and very cold at the time.

This species shews a far greater inclination for perching on trees than most of the genus.

EMBERIZA FUCATA.

Painted Buntings are common winter visitors, and put in an appearance as early as the first week in September, when they betake themselves to the paddy-fields and live luxuriously on rice. About the third week in April and on until the end of the first week in May they begin to move off to the north, by which time they are in good feather and much brighter in plumage than in the winter.

EMBERIZA AUREOLA.

The Rice-bird is an extremely abundant species on the spring and autumn migration; it passes through all the part of China under consideration, but does not stay for the winter. It arrives about October 12 and remains until the end of the month, and on the return journey it comes about April 19 or 20.

These little birds are much prized as dainties, and are caught in vast numbers by professional bird-catchers, who use precisely the same sort of clap-nets and call-birds as their confrères in England. Immense numbers are caught

and crammed into bamboo-cages, and at the end of the day they are taken to the river and drowned.

Rice-birds are prized by Europeans and Chinese alike, and not only do the rich natives at Canton consume large quantities, but many are tinned and exported to Singapore and to America for the benefit of Celestial exiles.

As a matter of fact, any small yellowish bird is sold as a Rice-bird by the Chinese, and one itinerant merchant in Macao was seen with two hundred *Motacilla melanope* to dispose of for culinary purposes.

EMBERIZA RUTILA.

The Chestnut Bunting is an irregular winter visitor, but one was obtained at Shia Po on January 6, creeping in long grass.

On April 19 large numbers of these birds were found in the mulberry-canals of the Delta, and remained plentiful until the end of the month. Such an incursion was quite unusual however, and due perhaps to the floods which occurred about that time. In the autumn of 1907 these birds did not migrate south *viâ* the river.

EMBERIZA SPODOCEPHALA.

The Black-faced Bunting is a common winter visitor, arriving about October 19, and leaving again in the latter part of April and early in May. It frequents paddy-fields in the autumn and mulberry-canals in the spring, in company with *Emberiza fucata*.

MELOPHUS MELANICTERUS.

This handsome Bunting is resident at Kowloon and on the coast of Kwang Tung generally, and in the winter is gregarious and goes about in considerable flocks. At the end of March and until the end of April these are in process of breaking up and mating is taking place.

The bird builds its nest either on the ground or in a cleft in a rock, and eggs may be found in April, May, and June. The nests are very difficult to find, and the birds require a lot of watching before their secret is revealed. Whilst the

hen is sitting the cock sits up in true Bunting fashion on a boulder or on a telegraph-post, and sings his Bunting-like song continuously and most monotonously.

Eggs vary in length from $\cdot 86$ to $\cdot 76$ and in breadth from $\cdot 68$ to $\cdot 61$, and average $\cdot 80 \times \cdot 76$.

ARTAMUS FUSCUS.

This species was found only at Kwei Hsien, in Kwang Si, and as observations were made in August no eggs were obtained. When hawking for their prey they look very like Swallows; they are very tame, and have two cries—a pleasant twitter and a harsh shriek. At sunset family-parties may be seen sitting on a bare bough, the young ones being fed by their parents.

The nest is a very slight affair of small rootlets lined with finer material, and is placed, like that of so many other species in this country, at the extremity of a slender bough and at a considerable height from the ground.

SPODIOPSAR SERICEUS.

This Starling is a winter visitor, and was first seen on November 3 and last seen on March 3. It always occurs in flocks, which consort at times with Mynahs and roost with the huge mobs of the latter in the bamboos fringing the reed-beds at Moto Mun and elsewhere; they were observed to fly from the coast, where they spent the day, to rest at night in clumps of these trees.

STURNIA SINENSIS.

This handsome little Starling is a common summer visitor to both Kwangs, but is more abundant on the coast than inland. It is also observed occasionally in the winter months at Mirs Bay and Kowloon. The birds arrive on the coast about the end of March or very early in April, and perhaps a day or two later at Samshui; they come already mated and commence nesting-operations without delay.

A pair of these birds was observed attempting to excavate a hole in a bombax-tree, but, as a rule, they nest in crevices

of buildings, especially in old and ruinous pagodas, and often in company with *Passer montanus*, *Acridotheres cristatellus*, and sometimes with *Cypselus subfurcatus*.

In Hong Kong these Starlings seek out their nesting-sites of the previous year and repair their old nests, littering and fouling the ground beneath to an astonishing extent. They frequently nest in large communities. They occasionally feed upon the ground, but, as a rule, perch on the slimmest twigs and branches of various trees, where they pick insects and larvæ from the leaves.

The birds which breed at Hong Kong all leave by about the middle of September, but they have been noticed at Macao a little later in the month.

The first eggs are laid at the beginning of May and the majority by the middle of the month; four or five form the usual clutch. This species is not double-brooded, and the young remain with their parents all through the summer.

Eggs vary in length from 1·08 to ·95 and in breadth from ·75 to ·69, and average 1·01 × ·74.

STURNIA STURNINA.

On October 11, 1904, near Samshui, a flock of these birds passed overhead whilst one of the writers was shooting pigeons. He browned them and obtained several specimens; all of these, except one, were lost when H.M.S. 'Robin' was afterwards wrecked.

This is the only occasion on which this species was met with.

GRACULIPICA NIGRICOLLIS.

The Chinese Grackle is one of the commonest birds met with in both provinces, but is rather more abundant up the river than on the sea-coast, and less plentiful to the west of Wuchau than to the east of that place.

The loud and cheerful piping cry of this bird is one of the most familiar, as well as one of the most pleasant sounds of the southern Chinese countryside, and is to be heard continually after the moult is over in November, until the succeeding autumn. At times these birds have been seen

following the plough as Rooks are wont to do, and it seems probable that they live entirely on grubs and insects.

In the summer months, after the young are hatched, Grackles go about in family-parties, but in October and November, when their numbers are largely augmented by others from further north, they form themselves into large flocks, and these join company with those of Starlings and Mynahs, the whole concourse roosting in favoured reed-beds or bamboo-clumps, and performing graceful aerial evolutions at sunset before retiring to rest, with much clamour and squabbling.

This bird, in south-eastern China, places its large, untidy, globular nest usually in a bombax-tree, but not infrequently also in a banyan or a bamboo, and it shews a decided preference for the proximity of the abode of a Magpie. The first nest is usually completed about the middle of April, and the young are hatched after about sixteen days incubation. They usually rear three broods, and for each laying they build a new nest, the first of which occupies them ten or fourteen days in construction, whilst later ones can be finished in a day if necessary. The three nests are often placed in the same tree, and after the first clutch of eggs has been hatched the empty nest is usually commandeered, without delay, by a pair of Mynahs, *Acridotheres cristatellus*, who, having added a few feathers and the indispensable piece of snake slough, proceed to lay in it.

On one occasion the three nests were found in one tree, the latest being in possession of the Grackles, the earliest in that of a pair of Mynahs, whilst the second contained a nest of the Magpie-Robin with a clutch of three eggs.

The full clutch for the first laying is four or five eggs, much more often the former; for the second, three or four, usually three, and for the last, two or three, more frequently two.

The eggs of this species are usually blue and unspotted, but on various occasions pure white eggs were found, and on others the eggs were observed to be spotted with minute markings of brownish purple. These spotted eggs are

never met with until late in the season. On one occasion a Grackle's nest containing a white egg was found inside a Magpie's great domed structure, and on another, two white eggs were found in a nest with one of the Koël. When four eggs of the Koël are found in a Grackle's nest those of the rightful owner are invariably disposed of, though how the usurper distinguishes its own productions in the dark interior of the covered nest it is difficult to say.

The Grackle attacks the Koël just as the Crow does in India, but never so desperately, and the young Koël or Koëls grow up very comfortably with the young of their foster-parents, who feed them side by side. Although usually placed in a tall tree, a nest was found, in course of construction, only four feet from the ground.

Eggs have been taken from April 20 until August 9, and they vary in surface from smooth and glossy to decidedly granular.

A large number of eggs average $1.28 \times .91$, and vary in length from 1.40 to 1.18 and in breadth from .96 to .86.

ACRIDOTHERES CRISTATELLUS.

The Chinese Mynah is one of the commonest resident birds in Kwang Tung and Kwang Si.

In the winter months these birds are gregarious, and large flocks are not infrequently seen at Moto, where they roost at night in the reeds. Their clamour, Starling-fashion, is deafening before they go to roost, and, also Starling-wise, they indulge in aerial evolutions before retiring. The formation of flocks has been noticed as early as July 23, but more usually takes place in October.

The Mynah breeds plentifully at Hong Kong and elsewhere on the Kwang Tung coast, where, as a rule, some hole in a building, the top of a waste-water pipe, or still more frequently the deserted hole of one of the Kingfishers, is made use of. In the latter, a sort of step is always scratched at the lower portion of the orifice, which is also considerably enlarged.

Up the West River and inland the favourite site is an old

Magpie's nest, though ruinous old pagodas and holes in trees are also made use of, and the deserted nest of *Graculipica nigricollis* is sometimes resorted to. In suitable situations breeding-colonies are often found.

The nest itself is an untidy affair of straw, dry grass, pine-needles, feathers, wool, paper and other rubbish, and invariably, as pointed out by Rickett and La Touche in their 'Birds of Fokien,' contains pieces of snake's slough.

The eggs are blue, and much resemble those of the Starlings, and like so many blue eggs they vary much in colour-intensity. Eggs pure white in colour have been taken, and eggs with a few spots have occurred later on in the season. The most usual number of eggs in a clutch is four, but five, six, and seven are found, the latter rarely.

The earliest date for fresh eggs is April 15 and the latest July 4, but the majority of these birds breed in May and are double-brooded.

The Mynah is a great mimic and has been heard in a wild state imitating the Chinese Francolin and other species. As an excellent talker, it is in great requisition among the Chinese for a cage-bird.

Eggs vary in length from 1.26 to 1.07 and in breadth from .90 to .79, whilst they average $1.16 \times .85$.

MUNIA ORYZIVORA.

Java Sparrows are not very common at Hong Kong, and have usually been noticed in the spring and early autumn.

On several occasions in late September and early October small flocks have been seen in the trees at the Hong Kong Naval Hospital and at Happy Valley, and in February a solitary bird was noticed at Stonecutter's Island.

In June 1905, the Punjabi police sergeant at the R.N. Hospital captured a bird of the year, not very well able to fly, in a butterfly-net, so that the species must breed somewhere in south-eastern China, and seeing how extraordinarily local many species are it might easily be overlooked.

MUNIA TOPELA.

These small Weavers are common everywhere in both Provinces, both on the river and on the coast. In the winter they congregate in considerable flocks in some parts, but never in Hong Kong.

At Macao in the Governor's summer garden there are two Monkey Puzzler trees, in which large numbers of these birds breed, and where their domestic arrangements are easily watched. The nests are huge for the size of the builders, untidy, oval masses of grass and weeds, having the long axis horizontal, but lined within very carefully with fine grasses and possessing a well-made rounded entrance-hole at one end. On one occasion two nests were found, built one on the top of the other, but quite separately, so as to form a sort of two-storied structure.

It is amusing to see this little bird struggling to windward with a huge piece of grass in its tiny bill, which it drops and picks up twice on its way; finally it tucks it into the thatch of its house and without delay darts away again in quest of more building-material.

The usual clutch at Macao is six or seven, and though eight, eleven, and twelve eggs have been found, these are probably the product of two hen-birds. They begin to build late in March, and eggs may be found in April, May, and June. In November large numbers were noticed passing south on migration.

Eggs vary in length from $\cdot70$ to $\cdot58$ and in breadth from $\cdot46$ to $\cdot40$, and average $\cdot62 \times \cdot44$.

UROLONCHA SQUAMICOLLIS.

This little Weaver is widely distributed on the West River and on some parts of the Kwang Tung coast, but at Hong Kong and in most parts of the Kowloon Peninsula it is a winter visitor or a spring migrant, and was not known to breed.

At Canton, Macao, and on the West River however, it is a common breeding-species, and builds its nest in a variety

of situations : often in a fir-tree, sometimes quite low down, or in a bamboo, or, again, high up in a banyan or bombax tree at an elevation perhaps of forty to sixty feet. In a large tree the nest is frequently placed at the extremity of a small bough, and in such a situation is very difficult of access. Empty nests are used for sleeping in in the cold weather, and the birds were seen building a nest in January, which was used as a sleeping-place.

In the winter time these birds go about in flocks, feeding on the paddy-fields with the Sparrows, Doves, and Buntings.

Five or six white eggs are laid, from early in April until September, and sometimes even later. Seven is not very infrequently the clutch early in the season.

Eggs vary in length from $\cdot 69$ to $\cdot 58$ and in breadth from $\cdot 46$ to $\cdot 40$, and average $\cdot 63 \times \cdot 43$.

ALAUDA ARVENSIS.

The Skylark is met with occasionally in the winter months, and it has occurred at Samshui, at Macao, and in the Kowloon Peninsula.

ALAUDA CÆLIVOX.

This little Lark is fairly common in Kwang Tung and Kwang Si, more so up the river than on the coast, and it is a very popular song-bird with the Chinese. It has been observed to sing very finely, sometimes on the ground or upon the slight elevation provided by a Chinese grave, and also on the wing, when having ended its song it will drop twenty feet, hover a moment, and then drop again straight to the ground.

The nest is much like a Skylark's, but perhaps a trifle more flimsy, and the eggs are laid, as a rule, in April ; while, as the bird is double-brooded, a second clutch is deposited in June or July. Fully fledged young have been seen as early as May 16. The usual clutch is four, but five eggs were once obtained.

At Kwei Hsien, in Kwang Si, these birds were very

numerous, and as the market price for a young bird is six-pence, all the small boys who tend water-buffaloes are on the look-out for the nests.

The Chinese take these Larks out into the country and placing the cages on the ground, or on a small mound, one bird will begin to sing, when another Lark will at once commence in rivalry, and so great singing matches are brought about.

Eggs vary in length from $\cdot 85$ to $\cdot 76$ and in breadth from $\cdot 67$ to $\cdot 57$, and average $\cdot 78 \times \cdot 62$.

MIRAFRA CANTILLANS.

The Singing Bush-Lark, which does not appear to have been previously met with in China, was only noticed at Kwei Hsien in Kwang Si, where it abounds in the large grass-plain which is peculiar to that place, and is very different from the surrounding hilly country.

This bird loves to sit on the top of a boulder, whence it utters its feeble song of a few disconnected notes, and such boulders, by August, grow quite white from the accumulation of droppings upon them. At times, however, it sings in the air, but only at a height of from twenty to thirty feet, when, closing its wings, it drops to earth. It is a great skulker in grass and other vegetation.

The nest is built in a small hollow scratched in the ground, and is externally composed of small broken pieces of dry grass and internally of fine rootlets, and is so frail that it is very difficult, or impossible, to remove it complete. On July 22 nests were found containing eggs in all stages of incubation and young birds. This species is double-brooded, and the second clutches are very late, because in June the Chinese cut the grass on Kwei Hsien plain.

Eggs average $\cdot 78 \times \cdot 58$, and vary in length from $\cdot 89$ to $\cdot 75$ and in width from $\cdot 67$ to $\cdot 56$.

UPUPA EPOPS.

A Hoopoe, which flew on board a small river-steamer near the island of Lintin, between Macao and Hong Kong,

was taken to Mr. J. C. Kershaw, who gave it to the writers.

Mr. J. C. Kershaw has occasionally seen it whilst passing along the coast on migration at, or near, Macao.

CYPSELUS PACIFICUS.

Except on a mountain-top at Howlik, these Swifts have not been observed away from the coast.

The birds are summer visitors, and the earliest date on which they were noticed at Hong Kong was March 26, but most arrive in April, and leave again for the south early in September. The greater number of the birds, however, pass on to regions further north.

This species shews a strong partiality for rocky precipitous islands and for barren mountain-tops, where it flies round and round in the same manner as the European Swift, and, like it, is only to be seen on certain days and chiefly in the morning and evening.

Whether these birds ever breed in the neighbourhood of Hong Kong was not ascertained.

CYPSELUS SUBFURCATUS.

This is a fairly common summer visitor to the West River, but it does not occur on the coast. The first arrival came in on April 3, but the bulk of the birds did not appear until some weeks later. They leave for the south again during the third week of October.

At Kwei Hsien, in Kwang Si, numbers were found breeding in limestone-caves, and as some nests contained incomplete clutches of fresh eggs and others fully fledged young on July 20, two broods are evidently reared. The full clutch is four. At Samshui about twenty-five pairs breed on the beams inside the roof of a small temple. On October 22 the birds were still sleeping in the nests used during the past summer.

When the nest is made in a cave it is placed in a crevice or under the roof, and is difficult of access. In a temple it is usually fixed on a beam under the roof.

The nests are made of dry grass, fern, and leaves, with a few flowering grass-heads and a feather or two, all cemented together by a mucilaginous secretion from the birds' salivary glands. They usually have two entrances, but when under the roof of a cave one side hangs down so as to form a single entrance.

The eggs are white, and three average $\cdot 86 \times \cdot 59$.

CHÆTURA CAUDACUTA.

During the third week of April, 1907, several pairs were noticed by Mr. J. C. Kershaw hawking for flies in the forest at Howlik.

CAPRIMULGUS MONTICOLA.

This Nightjar occurs as a winter visitor on the lower parts of the West River, but is rare on the coast.

At Kwei Hsien, in Kwang Si, birds both mature and immature were plentiful on the plain, and there can be little doubt that they breed there.

CAPRIMULGUS JOTAKA.

The Indian Nightjar is a winter visitor which only occurs between the months of October and April, while a good many pass through on migration.

As a rule, it appears on its way south from October 12 to 26, and on its return journey leaves about April 21 or a little earlier. It is to be seen up the West River as well as on the coast, and it has been noted on the small islands between Hong Kong and Macao.

EURYSTOMUS CALONYX.

The Broad-billed Roller passes through on the spring and autumn passages in small numbers, and has been observed in April and May on the former, and in September on the latter. A few pairs were seen at Howlik on May 10, but, as a rule, these birds, like so many others, keep to the coast. Its undulating flight is very curious, and is not unlike that of the Green Woodpecker.

CERYLE VARIA.

This Kingfisher is confined to fresh water, or at any rate to such parts as are only slightly brackish, as where a considerable freshwater stream debouches into the sea.

It is a resident, and it makes its nesting-hole almost always in the main banks of the river, but has been known to bore into a sandy cliff on the sea-shore or into a bank of disintegrated granite on a hill-side. The nesting-hole is usually from three to five feet in length, with the usual nest-cavity at its extremity.

In time of heavy flood many Kingfishers' holes become inundated. It was found, however, that when a hole had been laid open the old birds were able to transport their young to another, probably in their beaks.

After the first egg is laid, one bird always remains in the nesting-hole to guard it against rats, but incubation is not commenced until the full clutch is laid. The male sleeps in a separate hole.

Fresh eggs have been found as early as Feb. 16, and as late as May 12, but the usual time for laying is from early March to the middle of April. This species is single-brooded, and a full clutch of eggs is four or five.

Eggs vary in length from 1.27 to 1.03 and in breadth from .99 to .93, and average $1.19 \times .96$.

CERYLE LUGUBRIS.

This large Kingfisher is rather sparingly distributed in suitable localities in Kwang Tung and Kwang Si. It was noticed at several places on the West River, including Howlik and Tam Chau, above Wuchau.

In the New Territory it was seen several times, and on one occasion, as it flew from one side to another of a small rocky inlet, near Tolo Harbour, it seemed as if it might sometimes fish in the sea, though usually it is confined to fresh water. Its nest and eggs were not obtained.

Its cry is a metallic twitter, and not loud for the size of the bird.

ALCEDO BENGALENSIS.

Alcedo ispida Linn.; Sharpe, Cat. B. M. xvii. p. 141.

This little Kingfisher, so like the common European species, except in size, is very abundant both on the sea-coast and inland on various waterways and rocky streams.

The bird is quite as much at home when fishing in salt water as in fresh, and it may be seen either perched on a rock or stake on the sea-shore, in the familiar expectant attitude, whence repeated darts are made at small fish. Sometimes it is observed hovering with rapidly moving wings, Kestrel-fashion, over the surface of the sea, to drop like a stone in a small cloud of spray on to its prey, from a distance of twenty feet or more.

The bird is a resident, and, though subject to some local movement, is probably not really migratory.

The nest is very frequently made in the high mud or earthen bank of a paddy-field, and may be a very considerable distance from any stream or body of water. Generally it is two or three feet above the water, and nearer the bottom than the top of the bank. The nesting-hole is not more than eighteen or twenty inches deep.

April 12 is the earliest date for eggs and the latest July 5, so that undoubtedly this species is double-brooded.

The usual clutch is six or seven, and eggs vary in length from .83 to .74 and in breadth from .71 to .64, and average .80 x .68.

HALCYON SMYRNENSIS.

The Smyrna Kingfisher is found commonly throughout the whole area under consideration, and is partly resident and partly migratory. A certain number of birds are to be seen throughout the winter, but these are largely supplemented in the third week of March at Hong Kong by individuals which arrive from the south. As soon as the migrants arrive they repair to certain steep banks on the hill-sides or in water-worn nullahs eaten out of the disintegrated granite by the spring rains, and into them they drive their nesting-holes. As a rule, a fresh hole seems to be made each year,

but not invariably. The birds shew the usual Kingfisher-like preference for a former nesting-site, and many holes may be seen in the same cliff or bank.

During the nesting-season these birds have a particularly cheerful laughing cry, in addition to the series of discordant shrieks, to which they give vent when disturbed or alarmed.

The nesting-hole is about eighteen inches to two feet deep, never more, with an enlarged chamber at its end, and the eggs are laid on the bare soil, with which they are invariably stained, and round them grows up an ever-increasing pile of the chitinous parts of various insects, the carapaces and other cretaceous portions of crabs, and many bones of lizards and other small reptiles ejected by the sitting bird.

During the nesting-season this species and the next have a curious habit, which almost amounts to a species of love-play. A pair will rise to such a height in the air as to be almost invisible to the naked eye, and then fly round and round in an aimless way, calling loudly their laughing nuptial cry, for as much as an hour together.

On rare occasions a single bird will fly high up in the air calling in this way, but never to such a height, nor for so long, as when both are present. At other times of the year the birds never fly at any great altitude.

This species and the next are greatly persecuted by the Chinese, who use their blue feathers for the manufacture of the well-known "Kingfisher enamel," which has been in use in China since the time of Confucius.

The eggs are laid at the end of April or early in May, the earliest and latest dates being April 29 and May 8. Unless disturbed these birds are single-brooded. Five is the usual clutch, and the eggs measure 1.23 to 1.11 in length and from 1.06 to .99 in breadth, the average being 1.14×1.03 .

HALCYON PILEATUS.

The Black-headed Kingfisher is confined in Kwang Tung to the sea-coast, where during the winter months it is a fairly common frequenter of various muddy creeks; on the

advent of the breeding-season in April its numbers are greatly swollen by individuals arriving from the south.

A fairly complete account of the nidification of this species is given by one of the writers in 'The Ibis' for 1908 (on page 455), and little can be added to it.

Apparently the Black-headed Kingfisher does not kill reptiles, at least it has not been observed to do so, but during the nesting-season it supplements its usual crab diet by abundant insects, principally beetles.

This species ranges north to Corea and south to India and the Malayan Islands, but it is always a scarce bird; in Hong Kong, however, during the nesting-season it is rather more common than the other representative of the genus and one of the most conspicuous birds in the island. Possibly the partial protection from the Chinese feather-hunters afforded it at Hong Kong has assisted to the increase of its numbers there.

This species sits closely, and the female is very frequently captured in the nesting-hole.

The eggs vary in length from 1.23 to 1.11, and in breadth from 1.09 to 1.01, whilst a large number of eggs average 1.18×1.04 .

DENDROCOPUS CABANISI.

This Woodpecker is sparingly distributed, especially near the coast, wherever there is a sufficiency of dead timber of a suitable size. Its call is a burr and a rattle, like that of the European Great Spotted Woodpecker.

On February 25 a pair was heard tapping near Wang Mun, and on June 5 near Samshui a pair finished excavating a hole in a fir-tree which had been used before, as it contained about a dozen holes altogether. However, the tree was blown down and so no eggs were obtained, although some fragments of white egg-shell shewed that the birds had probably bred there.

LYNX TORQUILLA.

Wrynecks occur in small numbers during the winter months, and some are observed also on the autumn and spring migrations in the months of November and April.

They have been observed to hunt on the ground for ants, and if disturbed to run for a tree and walk up the opposite side of it to the observer. They do not give vent to their characteristic and unpleasing call in the winter months.

MEGALÆMA VIRENS.

The Great Chinese Barbet occurs only in the sacred forest at Howlik, that sanctuary of so many species of birds, and there it is both resident and common. It spends most of its time at the top of some tall tree, and when it takes to flight has the appearance of falling from, rather than of springing from, its perch in the manner of other species. The flight is slow and undulating, and accompanied by a loud rustling sound, which is audible at a considerable distance.

These birds are very noisy, and especially so in the spring and summer, when their loud and mournful cry may be constantly heard, in addition to which they also have a harsh screech.

Their food consists of various fruits and berries, which they vigorously tear from the pedicles with their strong beaks, and it is when so engaged that it is easy to shoot a specimen, for it is on other occasions difficult to see, so protective is its colouring. On no occasion was the Barbet ever seen on the ground.

About the middle of April these birds are paired and commence to excavate their nesting-holes, which is done by either sex alternately. When excavating, the bird clings to the trunk of the tree in a vertical position, using the tail as a fulcrum and making a savage stab at the semi-decayed wood; it wrenches out a piece and lets it fall, and when this has been repeated about some twenty times the worker takes a rest and is relieved by its mate. It is only on these occasions that the bird takes up this Woodpecker-like attitude, at all other times it perches on a branch in the usual Passerine fashion.

The nesting-hole is excavated in a leisurely fashion, since one commenced on April 14 was still unfinished on the 24th, but then this species, like many others, often begins a nesting-site only to leave it incomplete. No eggs were

obtained, but three young birds were found on May 23 by Mr. J. C. Kershaw.

The nesting-hole is always in the main stem of the tree and usually high up, and the eggs are laid on the rotten wood and wood-chips at the bottom of the hole. Probably the first half of May is the best time to find fresh eggs.

COCCYSTES COROMANDUS.

This handsome Cuckoo was only seen twice; once in April, and once in June, at Samshui, so that it may be considered an unusual summer migrant; doubtless it travels by some other route to the north.

HIEROCOCCYX SPARVERIOIDES.

The Hawk Cuckoo is a rare and probably accidental visitor. It was obtained once—on October 21 in the Delta, and was seen on September 8 but not obtained.

CUCULUS MICROPTERUS.

The Indian Cuckoo is a common summer visitor at Macao and to certain parts of the West River, but some also pass through to districts further north. It usually arrives during the first week in May and leaves at the end of September, or early in October. A young bird was, however, seen at Howlik on May 6, and another, a mature individual, at Wuchau, as late in the year as November 6.

On the Chinese mainland, a few miles from Macao, there is a small wood of large timber, in which some half a dozen pairs of Black Drongos (*Buchanga atra*) yearly take up their summer residence for breeding purposes. In this wood a nest of the Drongo was found, partially built at the end of a horizontal bough of a fir-tree, some forty-five feet from the ground, on May 11. It was not possible to visit the nest again until May 26, when it was found to contain two eggs of the Drongo, somewhat incubated, and a fresh egg of this Cuckoo.

The Drongos continually assailed the Cuckoos, dashing at them, both from before and behind and from either side;

the latter appeared, however, to view these assaults with perfect equanimity. From the fact that fragments of the eggs of this Cuckoo were often picked up under the trees in this wood, it seems probable that the Drongo may turn the eggs of *Cuculus micropterus* out of its nest on occasion, for such shells are those of fresh eggs.

Mr. J. C. Kershaw shot a female of this species, from the oviduct of which he took an egg, that was about to be laid. It is whitish in ground-colour, spotted and clouded about the larger end with rusty red, and about the same size as that of *Cuculus canorus* (see Plate V. fig. 1).

Staff-Surgeon J. P. H. Greenhalgh, R.N., noticed that the young of this species ejects the young of the foster parents in the same fashion as does that of the European Cuckoo.

CUCULUS CANORUS.

Cuckoos of this species are only obtained on the spring and autumn migrations, when they are seen singly and are never heard to give their characteristic call.

Some of these birds are seen at Hong Kong and Samshui as late as the first week in May.

CUCULUS SATURATUS.

Cuculus intermedius Vahl; Shelley, Cat. B. M. xix. p. 252.

The Himalayan Cuckoo is considerably rarer than the other two allied species, but has been seen and shot in October and in April, on its spring and autumn migrations.

CACOMANTIS MERULINUS.

This Cuckoo is a common summer visitor, its abundance being doubtless relative to that of the Tailor-bird, on which it is parasitic. Occasionally it arrives as early as at the beginning of March, but the majority of these birds appear from the last week of that month until about the middle of April.

From its peculiarly penetrating and mournful cry, it is well known to the Europeans of south-eastern China, who call this species the Rain-bird, because it is supposed to be most noisy before a spell of wet weather. The fact that it

puts in an appearance, and is breeding and calling during the wettest time of the year, has in all probability given rise to its name.

A series of low, penetrating whistling sounds in a falling cadence, terminated by several rising notes, constitutes the song of the male. The female calls the male to her by a harsh dissyllabic cry, which is quite characteristic. The male repeats his monotonous call all day and nearly all night, the effect being most maddening; the female was only observed to give her special note during daylight hours. After the female has called up the male by her peculiar cry, pairing has been observed to take place in the topmost branches of a high tree.

This species arrives ready mated, and breeding commences at once; a pair of Cuckoos takes up a special district and is parasitic on the Tailor-birds (*Sutoria sutoria*) within it, and other pairs do not intrude on territory that does not belong to them.

From the position of the nests of the Tailor-birds, and the difficulty there is in getting even two fingers into them, whilst *in situ* there is little doubt that the Cuckoo lays its eggs on the ground, and afterwards places them in the nest of the foster parents.

Except in point of size, the eggs of the parasite bear a strong resemblance to those of the host; they are of a greenish-blue ground-colour and are easily divisible into two well-marked types: in one there are faint rusty, reddish-coloured markings, of indefinite outline, on a greenish-blue ground, and in the other the markings are like dried blood on a much darker ground and with more of blue in it.

It is curious that precisely the same varieties are met with among the greenish eggs of *Sutoria*, and it is also true that *Cacomantis* often lays an egg of one type in a nest of *Sutoria* containing those of the other. *Cacomantis* also places its eggs in the nests of *Sutoria* which contain eggs having a white ground-colour, so that apparently neither *Sutoria* nor *Cacomantis* are capable of discrimination in the matter.

There are reasons for being fairly sure that a female *Cacomantis* always lays an egg of the same type.

At the end of the summer there is an alteration in the song of the male, and some of his notes are dropped, especially those which terminate the call.

The food consists of insects, and caterpillars are a favourite article of diet, enormous quantities being eaten.

This bird was not observed after the second week in September.

Eight eggs average $\cdot 72 \times \cdot 53$, and vary in length from $\cdot 73$ to $\cdot 70$, in width from $\cdot 54$ to $\cdot 51$. (See Plate V. fig. 9.)

EUDYNAMIS HONORATA.

The Koël is a common summer visitor, and on rare occasions remains for the winter as well, but then only on the coast. These birds first appear from the south about March 8, and the main body about the middle of that month. In addition to those which spend the summer a large number pass through to parts further north, and on the return journey the birds are most numerous during October.

The call of the Koël is very well known and advertises its arrival in the district at once, but at times, especially after dark, it was heard to utter a dissyllabic note, quite different from its usual diurnal one. On these occasions the Grackles also began to call, making considerable noise.

In southern China, as Swinhoe was aware, this Cuckoo lays its eggs in the nests of the Grackle (*Graculipica nigricollis*). The eggs of the Koël have been found from May 7 until August 1, so that a considerable number are probably laid in a season. Although it is usual for one egg of a Koël to be found with a clutch of the Grackle, two, three, and four have been at different times obtained. On one occasion four eggs were found in a Grackle's nest, all of which from their measurements and appearance were almost certainly those of one Koël.

As far as could be ascertained, there was never any attempt on the part of the young Koël to eject the young Grackles from their rightful tenement, and the latter were

frequently observed to be fed along with the former by the foster parents.

The eggs average $1.32 \times .90$; they vary in length from 1.40 to 1.24, and in width from .97 to .87.

CENTROPUS SINENSIS.

This, the larger of the two Crow-Pheasants, is an exceedingly common bird at Hong Kong, Macao, and on the Kwang Tung coast generally, but it becomes less abundant further inland, though found in the breeding-season near Kwei Hsien and below Shau Kwan, on the North River. The note is quite characteristic—a loud “hoo! hoo! hoo!” repeated at intervals, and especially noticeable in the spring and summer, although to be heard in the winter also.

This bird has another note, a low clucking sound, which may be peculiar to the female, and is not heard except at the breeding-season. The “hoo! hoo!” sound the bird makes with the bill almost, if not quite closed, its head thrust downwards and forwards.

Although given to skulking, this Crow-Pheasant is more frequently seen than the smaller species; indeed, the two sexes may be often observed in amorous chase of one another in the nuptial season.

The food is chiefly grasshoppers, of which the crop contains at times extraordinary numbers.

In the early morning the birds have been seen perched on swaying bamboos overhanging the river, where they come down to drink.

We are indebted to Mr. J. Power, Imperial Maritime Customs, for the only eggs of this species obtained. On June 30 a nest and two fresh eggs were brought to him by a grass-cutter on the island of Tong Ho. The nest was described as a ball of coarse grass, but it had practically fallen to pieces before it reached him. The two eggs averaged 1.33×1.10 .

CENTROPUS BENGALENSIS.

The smaller Crow-Pheasant cannot be considered a common bird like the last, and was only noticed at Wuchau and on the outskirts of the forest at Howlik, at Shekwan Bay, and

on one of the small outlying islands off the river's mouth. Along the river it appeared to favour the hilly country only. Swinhoe found it at Hong Kong, but it does not occur there now, or only very rarely.

On June 16 a nest with four slightly incubated eggs was found by a woman cutting grass on the Howlik Mountain. The nest was a loose ball of coarse flags and elephant-grass, and was placed in dense elephant-grass. The eggs averaged $1.09 \times .98$.

PALÆORNIS TORQUATA.

The occurrence of this Parroquet is possibly of somewhat recent date, and it may be that it was accidentally introduced at Hong Kong. There is no doubt, however, that this species is now very well established at Hong Kong, though it was not noticed from 1900 to 1903. It has also been observed at Macao, and possibly at Wuchau. These birds can be seen in various parts of the island of Hong Kong, and observations made at the Naval Hospital enabled a fair idea to be formed as to their habits, which are exceedingly regular.

The birds seen at the Naval Hospital made a practice of arriving from the westward and perching in the banyan-trees about 7 A.M., and again at about 5 P.M., but the last-named visit they sometimes omitted.

There is no doubt that this species breeds at Hong Kong, for family parties have been noticed as early as the end of May. The Parroquets remain at Hong Kong all through the year except during January and February.

Fortune, the botanist, states that he shot a Parroquet at Canton about 1841.

CIRCUS PYGARGUS.

Montagu's Harrier is a rare winter visitor to Kwang Tung, and was seen once in December up the North River, and again on the coast in March near Deep Bay.

CIRCUS ÆRUGINOSUS.

Marsh Harriers are not uncommon during the winter months, when they haunt the many large marshes in the Delta country.

ASTUR CUCULOIDES.

This bird was obtained once only, at Howlik, on May 6, when, with wings and tail expanded, it was drying itself on the top of a bamboo. Its stomach was full of the remains of frogs.

ACCIPITER NISUS.

Sparrow-Hawks are common winter visitors to Hong Kong and the neighbouring coast, as well as to the West River. They appear about the middle of October and leave again about the middle of April. When very cold weather occurs in January and February their numbers seem to increase at Hong Kong.

On March 1, one of these birds was seen to dash into a little low bush at the Hong Kong Naval Hospital and snatch a sitting Sparrow from among a dozen others, and make off with it, all in a few seconds. On another occasion, attracted by the light, one flew into a well-lighted ward at the Hong Kong Naval Hospital, and was there captured.

ACCIPITER VIRGATUS.

The Chinese Sparrow-Hawk has only occurred once, on March 10, at Shiu Hing, near Samshui.

BUTEO PLUMIPES.

Buzzards are, in some rare cases, apparently resident, and have been seen in the Kowloon Peninsula and at Hong Kong in May and June, but as a general rule they do not become abundant until about October and November, when numbers arrive for the winter. They are usually solitary or in pairs, and in Hong Kong do not seem to confine themselves to regular tracts of country, as they were noticed to do in some of the rural districts.

They are never seen quartering over the harbour looking out for garbage, after the fashion of the Black-eared Kite, from which also they are easily distinguished by their rounded tails and mewing cry.

AQUILA CHRYSÆTUS.

Golden Eagles were seen from time to time, usually alone, and most often at Howlik. On one occasion two were observed

on a pine-tree, whence *Chibia hottentotta* drove one away, a thing seen to occur on other occasions also. There was no evidence that these Eagles were breeding.

Mr. J. C. Kershaw, on May 25, for several hours observed four Eagles soaring together and screaming.

BUTASTUR INDICUS.

This Buzzard-faced Eagle is a not uncommon winter visitor to some parts of the country, both on the coast and inland. Arriving in September and early October, it remains until April, and during its stay each one confines itself to a special tract of country over which it quarters in search of food, usually fish.

This species does not often perch in a tree, preferring the paths between the paddy-fields, or the stone walls which shut these off from the river.

HALIAËTUS LEUCOGASTER.

The White-bellied Sea-Eagle is not common, but it does occur on the Kwang-Tung coast and appears to be a resident there. One pair of these birds was watched for four years and found to roam from Macao to Hong Kong, a distance of forty miles.

On an island about twenty miles from Macao, a nest of this species was found; it was an immense collection of sticks, among boulders on the hill-side, so situated that no climb was necessary to reach it. The nest measured seven feet by two and a half, and although no part of it could be called a cup, on one portion there was some paddy straw and a few fresh green leaves. In the following year, on March 14, two addled eggs were found in it, and the nest now contained many pieces of bamboo, and there was a very flat sort of cup of the flowering tops of certain reeds and an abundance of fresh green leaves. The eggs appeared to have been deserted some time.

HALIASTUR INDUS.

These birds were only observed during the summer months in the Province of Kwang-Si, where they appeared to take the place of *Milvus melanotis*.

It is as well, however, to note that in winter it is impossible for the gunboats to proceed above Wuchau, to the westward of which these birds were observed.

MILVUS MELANOTIS.

The Black-eared Kite is a very common bird on the Kwang Tung coast, its numbers being much greater during the winter than at other times. Of those which remain all through the year only a very limited number are breeding-birds, and these, almost without exception, nest in the vicinity of the sea.

At all times it may be seen hawking over the harbour at Hong Kong, picking up all sorts of floating refuse, and on such material it chiefly feeds, but it has been known to attack and kill a wounded small bird on occasion.

Black-eared Kites display a most astonishing partiality for certain sites, especially during the winter, and in such they collect in great numbers, by day and night. A "kitory," to coin a word, may be a clump of large trees, a mountain top, or even a small knoll or kopje, but in any case it is plentifully littered with feathers and white with droppings. The same favoured spots are made use of year after year, and as the birds frequenting one of them may number a couple of hundred, and as they do not appear to wander very far afield, it is wonderful how they all find sufficient food.

In south-eastern China, with rare exceptions, the Black-eared Kite places its nest in a tree, frequently a good-sized fir, but it has been found on rocks as well. The nest, which the birds always build themselves, and never appropriate from any other species, is made externally of sticks, often of considerable size, and lined with the most heterogeneous assortment of materials imaginable: paper, rags, human hair, Chinese caps, towels, pieces of flannel, feathers, chicken bones, and raw cotton, all have been found, and as these usually hang over the sides, they give it a very disreputable appearance. They display considerable attachment to their nesting-sites and tend to return to their old nests, or at any

rate to the vicinity thereof. This is also the case with *Corvus torquatus*, and Crows and Kites not infrequently are nesting neighbours, between whom considerable enmity always exists.

The eggs, either two or three in number, but never more, are laid as early in the year as January but more often in February or March. This species is not double brooded. At the nest it is not demonstrative, unless it has young, and then it may become very bold, and on one occasion a Chinese climber was struck on the head by one of these birds and blood was drawn by the blow. The Chinese have been known to take the eggs for food.

The eggs vary in length from 2.41 to 2.06, and in breadth from 1.84 to 1.66, whilst they average 2.18×1.70 .

PERNIS PTILONORHYNCHUS.

One specimen was obtained at Macao as it was going to roost on a hill covered with trees, where the Kites often resort for the night,

FALCO PEREGRINUS.

Falco communis Gm. ; Sharpe, Cat. B.M. i. p. 376.

Peregrine Falcons are fairly common visitors in autumn, winter and spring to Hong Kong, Macao, and the West River. At Hong Kong they never remain long, but at several places on the West River they single out some island on which to take up a permanent winter station.

Some of these birds seem to live chiefly on Teal, but others have been known to attack Pond Herons, and at one place, a rocky point was white with their feathers.

One was seen at Kwei Hsien in July, a pair up the North River at the same time of the year, and a fourth at the Great Rapids, in Kwang Si ; so that in favoured spots this species may breed in south-eastern China.

At Howlik a specimen was seen on April 23, by which date most Peregrines have departed.

FALCO SUBBUTEO.

The Hobby is a resident species on the West River and inland generally, but on the coast it only occurs as a rather

uncommon winter visitor, and at Hong Kong it is quite rare. At Wing On, about three miles from Howlik, there is a pine wood on the summit of a hill, which gives a fine view of the surrounding country, and here Hobbies congregate in numbers, after the fashion of the Black-eared Kites. On September 5 over forty were seen at this place together; possibly they were young birds waiting to migrate.

Although these birds are largely insectivorous, they also attack birds and mammals; they are not always successful, for one was seen to stoop half a dozen times at a White-faced Wagtail and to miss each time; eventually it gave it up in disgust; others were noticed to make unavailing attacks on a Swallow and a Bat.

This bird breeds in south-eastern China from the second week in June until the end of July, and three eggs seem to be the usual clutch, though sometimes four or two are set upon. Addled eggs are common, and a solitary young bird in a nest is not unusual.

It cannot be said that the Hobby makes a nest, and indeed it is but seldom that it even lines one. On one occasion a nest of this bird was seen on a small tree which juts out from the second storey of an old pagoda situated right in the great city of Shiu Hing, where, however, the Hobbies were perfectly safe and inaccessible. The eggs are generally laid, as at home, in or on an old nest of the Magpie, or that of the Collared Crow, more frequently the former, whilst on one occasion the Grackle (*Graculipica nigricollis*) had been the original architect. Usually the dome of the Magpie's nest is flattened down and the eggs are laid on the bare sticks, but occasionally a lining of pine needles is found, which is often no doubt accidental; on other occasions the eggs are laid on the old lining of the nest under the hood, the entrance being enlarged a good deal.

The Hobby does not at all mind how old or tumble-down the Magpie's nest may be, holes through the side or bottom are no drawback to it as a residence. On one occasion a Crow's nest was found which had been relined with pine needles, and as it was a nest of the year, this was apparently

done by the Hobbies themselves. On another occasion a Magpie had hatched off in a nest and it was then appropriated by a Mynah, which reared its young there, and finally, on the latter's old cup the Hobby laid its eggs.

The male bird usually sits up in a neighbouring tree and keeps watch whilst the hen is sitting, and when the eggs are taken both birds swoop round the tree squealing and screaming; when they have young they are even more violent. They will follow for a mile or two, screaming, after their eggs have been taken,

CERCHNEIS TINNUNCULUS.

Kestrels occur commonly on the West River and on the sea-coast of Kwang Tung from October to April, arriving about the second week of the former, and leaving about the end of the latter month.

A few apparently remain inland to breed, and on April 29 Staff-Surgeon C. E. Cortis Stanford, R.N., took eggs from a hole in a cliff on the North River. At Kwei Hsien in Kwang Si a pair of these birds was seen on July 15, so they probably breed in some of the rocks or caves there,

CERCHNEIS AMURENSIS.

The Eastern Red-footed Falcon is seen every spring, both in the Delta and on the lower reaches of the West River, but it is not in evidence during the autumn. In some years these birds are far more plentiful than in others.

PANDION HALIAËTUS.

Ospreys are winter visitors to the Kwang Tung littoral, and in some years are much more abundant than others. They are frequently noticed soaring, either singly or in pairs, round some hill-top, or sitting on a boulder; but it is doubtful if they ever pick up anything to eat on these occasions. Buzzards and Kestrels have been seen to dash at them and drive them away.

The sea-shore, and especially the land-locked harbours of the New Territory, has great attractions for them; for here there are many fishing stations, with their great quadrangular dipping nets, and their little fishermen's huts built of straw and perched on piles.

When the nets slowly emerge, to the creaking of the bamboo winch and the cry of the workers, the Osprey is not at all averse to stealing a meal from their contents. It may be seen sitting for hours on stakes in tidal waters without attempting to swoop at any fish.

KETUPA CEYLONENSIS.

Although this Owl was not met with by the writers, it was observed by Swinhoe and Kershaw.

BUBO IGNAVUS.

The Great Eagle Owl was found to be widely distributed both on the coast and up the river, but individuals are not plentiful, nor are they very readily seen. The large amount of game required by this Owl probably prevents it becoming very numerous. Early in May an immature bird of this species, in the forest at Howlik, permitted itself to be scrutinized for twenty-five minutes at a range of about ten feet, whilst a gun was brought to shoot it with. An adult at Hong Kong allowed almost as long an inspection, but at considerably greater distance.

These instances of apparent stupidity may be due to the well-known fearlessness of this Owl. It appeared to breed sparingly in the forest of Howlik, but the nest was not discovered—only the fully-fledged young bird mentioned above. Kershaw thought it bred on the boulder-strewn hills near Macao, but he has taken no eggs.

SCOPS STICTONOTUS.

This Scops Owl occurs on the coast especially during the autumn migration, but it is not common.

SCOPS GLABRIPES.

Scops elegans Cass. ; Sharpe, Cat. B. M. ii. p. 87.

This fine Scops is undoubtedly the most common Owl found at Hong Kong and in the adjacent mainland ; it was not met with elsewhere.

The call is a gentle "Hoo!" repeated at intervals. The food, from the contents of the stomach and from the pellets found under trees in which it had nested, appears to consist of Coleoptera and of small mammals such as mice and shrews.

It is strictly nocturnal and very stupid in daylight, for it will sit outside the Magpie's nest in which it has deposited its eggs and allow itself to be shot, or permit a climber to come within a few feet of it before it will budge. Out of seven clutches of eggs of this species which were taken, all except one were placed in Magpies' nests. That not so placed was the only clutch which was not taken by one of the writers, though from careful comparison of the eggs there is little doubt as to their identity. In this case they were laid in a hole in a steep bank of disintegrated sandstone, and there was no nest. The first clutch was taken on April 22, 1902, and the eggs were on the point of hatching; but eggs were taken well-incubated in the first and second weeks of May, and some as early as April 7, which were well set upon, so that from the end of March until the middle of May is probably the breeding-season. The usual clutch seems to be three, but two and five eggs sometimes occur in a nest.

Apparently this Owl does not begin to sit until the complete clutch has been laid, for all eggs from the same nest appear to be in the same stage of incubation. Although undoubtedly an old Magpie's nest is generally made use of, at times this Owl will seize on a new one in which the Magpie is about to lay, and which it has freshly renovated and lined for that purpose.

Twenty-one eggs average 1.40×1.20 , and vary in length from 1.48 to 1.34, and in breadth from 1.24 to 1.18.

GLAUCIDIUM WHITELYI.

This little Owl is a common resident species on the river, both in Kwang Tung and Kwang Si, but it does not occur, or only rarely, on the coast. These birds are often flushed from clumps of bamboo when Pigeons are being shot. The note is a loud chir-r-r-r-r! which commencing with a liquid sound, is followed by continually more rapid notes until a continuous "chur" results. The eggs are laid in March, or early in April, and as a rule a hollow tree or branch is chosen for their reception, but sometimes a good nest is made; at times the deserted domicile of

the Magpie may also serve, and that of the Mynah has been found appropriated.

On March 31 a pair of these birds was found to have dispossessed a couple of Magpies of their nest, and the male was sitting on a twig close by "churring" loudly, whilst his mate was inside the empty nest. The birds deserted this nest. On April 6 a bird was found sitting on three eggs in a well-made nest of strips of soft bark, placed in a hollow horizontal limb of a large banyan-tree, about ten feet from the ground, and so tightly did she sit that she had to be lifted out by hand squealing like a rat, and scratching and biting lustily. On May 1, up the North River, a clutch of four was taken, but the bird usually lays three eggs.

These Owls may be heard "churring" at all hours of the night and throughout the day as well; they are frequently mobbed in daylight by small birds. Eight eggs average 1.49×1.20 , and vary in length from 1.57 to 1.38, and in width from 1.27 to 1.16.

ASIO ACCIPITRINUS.

Short-eared Owls occur up the West River most often in the month of April and have, as a rule, been flushed whilst Snipe-shooting in mulberry-canals, or Quail-shooting in long grass.

This species was also met with in January, February, and May, and may be considered a rather scarce but regular spring migrant.

EXPLANATION OF PLATE V.

CHINESE EGGS.

- Fig. 1. *Cuculus micropterus*. Macao, 26 May, 1906.
 .. 2. *Alcippe lueti*. Howlik, 28 May, 1907.
 .. 3. *Parus cinereus*. Near Howlik, 19 May, 1907.
 .. 4. *Prinia inornata*. Moto Mun, 2 June, 1907.
 .. 5. " Tam-chau, 1 August, 1907.
 .. 6. *Pericrocotus roseus*. Wu-chau, 1 July, 1907.
 .. 7. *Chloris sinica*. Wu-chau, 29 March, 1906.
 .. 8. *Burnesia sonitans*. Howlik, 19 May, 1907.
 .. 9. *Cacomantis merulinus*. Hong Kong, 25 April, 1908.
 .. 10. *Terpsiphone incü*. Tak-hing, 29 May, 1906.
 .. 11. *Campophaga melanoptera*. Howlik, 17 June, 1907.



H. Grönvold, pinx.

Witherby & Co., imp.